

Shorter Contributions

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DISTRIBUTION OF THE FLIGHTLESS CARRION BEETLE *NECROPHILUS PETTITII* HORN IN VIRGINIA (COLEOPTERA: AGYRTIDAE). — The beetle family Agyrtidae (commonly referred to as “primitive carrion beetles”) consists of about 60 species worldwide, 11 of which inhabit North America north of Mexico (Peck, 2001). *Necrophilus pettitii* Horn, the only member of this family found in the eastern portion of the continent, is a secretive, rarely collected carrion feeder that is primarily active in the cooler months of the year or inhabits cool habitats at higher elevations (Peck, 1981, 2005).

The range of *N. pettitii* extends from Vermont, southern Ontario, and Michigan south to Florida and Louisiana (Peck, 1981, 2005). Most of the available collection records are concentrated in the southern Appalachians (especially near the Tennessee-North Carolina border), with only one previously documented locality in Virginia (Peck, 1981, 2005). The latter site is Mountain Lake in Giles County (Peck, 1981).

During the past two decades, pitfall/drift fence (DF) trapping surveys conducted by staff of the Virginia

Museum of Natural History (VMNH) and the Virginia Department of Conservation and Recreation, Division of Natural Heritage (VDCR-DNH), as well as others, have resulted in the accumulation of enormous series of carrion beetles (mostly various species of *Nicrophorus* and *Necrophila americana*, family Silphidae) from throughout Virginia. Included among these collections are more than 30 specimens of *N. pettitii* that greatly expand our knowledge of the distribution of this flightless species in the state. The following specimens are deposited in the VMNH and Arthur V. Evans (AVEC) collections:

Alleghany Co.: Warm Springs Mountain, Big Knob, 4 mi NE Covington, DF site 4, ca. 3800', dry open woods, 15 May-7 October 2002, VMNH/USFS study (VMNH, 1).

Amherst Co.: Tarjacket Ridge, FS 1167, 3500', 5 June 1998, J. Schilling (VMNH, 1).

Floyd Co.: 6 mi SE Willis, Rt. 726, Felker's property, 26 May 1995, J. M. Anderson, VMNH survey (VMNH, 2).

Grayson Co.: Grayson Highlands State Park, Haw Orchard Mountain Visitor Center, DF site 2, 17 September 1990, VMNH survey (VMNH, 1); Whitetop Mountain, DF site off FS 89, 5000', 16 March-23 April

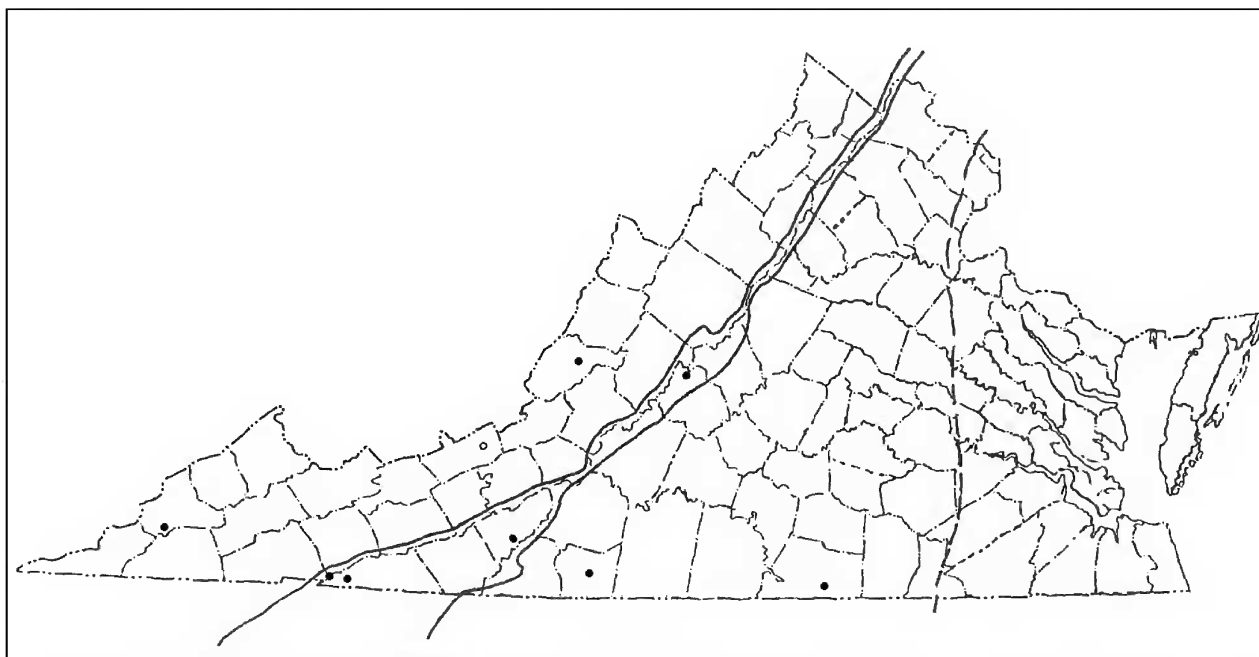


Fig. 1. Known distribution of *Necrophilus pettitii* in Virginia. Solid circles are new records and the open circle is a literature record (Peck, 1981). Solid lines indicate the limits of the Blue Ridge physiographic province and the dashed line marks the location of the Fall Line separating the Coastal Plain and Piedmont regions.

1994, VMNH survey (VMNH, 1).

Henry Co.: DuPont property near Martinsville, 1-7 November 1993, J. M. Anderson, VMNH survey (VMNH, 1).

Mecklenburg Co.: Elm Hill [now Dick Cross] Wildlife Management Area, 7.5 mi SE Boydton, 30 October-27 November 1995 (VMNH, 3), same but [27 November 1995? -] 24 February 1996 (VMNH, 5), all VMNH surveys.

Wise Co.: Powell Mountain Karst Preserve, ca. 1.3 km E Cracker Neck Church, Solomon's Seal Cave pitfall traps, 6-28 April 2009, C. S. Hobson and A. V. Evans, VDCR-DNH survey (AVEC, 1), same but 28 April-13 May 2009, C. S. Hobson and A. C. Chazal, VDCR-DNH survey (VMNH, 8), same but 13-27 May 2009, C. S. Hobson and J. F. Townsend, VDCR-DNH survey (VMNH, 10; AVEC, 1); same locality but rock outcrops at Parsons Cave, 12 May 2009, C. S. Hobson and A. C. Chazal, VDCR-DNH survey (AVEC, 1).

These new collections demonstrate that *N. pettitii* is much more widely distributed in the western portion of Virginia than was previously known (Fig. 1) and the species may be locally common (e.g., Wise Co. site). Four of the localities are in the Blue Ridge, two each are in the Ridge and Valley and the Piedmont, and the westernmost site is at the interface of the Ridge and Valley and Cumberland Plateau regions.

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A SECOND LOCALITY FOR *PHYTOCORIS HOFFMANI* HENRY (HETEROPTERA: MIRIDAE). — Henry (2009) described the plant bug *Phytocoris hoffmani* on the basis of two adult males collected by SMR (in a blacklight trap) in a red spruce (*Picea rubens*) forest in the Laurel Fork Recreation Area of the George Washington National Forest in Highland Co., Virginia. The type locality is within 0.3 km of the Virginia-West Virginia border at an elevation of approximately 3600 feet (1097 m) (SMR, pers. obs.). A full page color plate accompanied the description of this moderately large mirid. Although there are no definite plant associations for *P. hoffmani*, Henry (2009) speculated that red spruce would prove to be the host based on the species group to which it belongs. Limited subsequent beating by SMR of red spruce branches in northwestern Highland County has failed to yield additional specimens of this poorly known insect. Thus, RLH was pleasantly surprised to discover that sweep net samples obtained by SMR on 30 June 2010 from grassy bald habitats (elevation ca. 5400 ft/1645 m) near the summit of Whitetop Mountain in Grayson County, Virginia contained two more males of *P. hoffmani*. Whitetop is the second highest peak (5520 ft/1682 m) in the state and located at the common border of Grayson, Smyth, and Washington counties. The bald habitats along Forest Service Road 89 occur immediately downslope of the red spruce forest at the summit of the mountain. *Neolygus crataegi* Henry, another recently described plant bug, is currently known only from Whitetop Mountain and nearby Elk Garden; it is associated with hawthorns (*Crataegus* spp.) (Henry, 2007). The new record for *P. hoffmani* represents a southwestward range extension of about 170 miles/275 km (Fig 1). Both of the Whitetop specimens (and the holotype) are deposited in the Virginia Museum of Natural History, Martinsville, VA.